PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1.   (original) In a wireless communication system adapted for packet data transmissions, the system having at least one mobile station with pending data at a transmitter, a method comprising:

   calculating a packet delay time for a first receiver of the at least one mobile station with pending data;

   comparing the packet delay time to a first threshold;

   if the packet delay time violates the first threshold, calculating a first delay term;

   calculating a priority function for the first receiver using the first delay term; and

   scheduling transmissions to the receiver according to the priority function.

2.   (currently amended) ~~The method of Claim 1,~~In a wireless communication system adapted for packet data transmissions, the system having at least one mobile station with pending data at a transmitter, a method comprising:

   calculating a packet delay time for a first receiver of the at least one mobile station with pending data;

   comparing the packet delay time to a first threshold;

   if the packet delay time violates the first threshold, calculating a first delay term;

   calculating a priority function for the first receiver using the first delay term; and

scheduling transmissions to the receiver according to the priority function, wherein a[the] packet delay time function is calculated as:

$g(d)=k$ for packet delay time requirement less than the first threshold, wherein $g(d)$ is the packet delay time function and k is an integer.

3.   (currently amended) ~~The method of Claim 1~~ In a wireless communication system adapted for packet data transmissions, the system having at least one mobile station with pending data at a transmitter, a method comprising:

calculating a packet delay time for a first receiver of the at least one mobile station with pending data;

comparing the packet delay time to a first threshold;

if the packet delay time violates the first threshold, calculating a first delay term;

calculating a priority function for the first receiver using the first delay term; and scheduling transmissions to the receiver according to the priority function, wherein a[the] packet delay time function is calculated as:

$g(d)=DRCMAX/DRCAVE$ for packet delay time requirement greater than the first threshold, wherein DRCMAX is a maximum of DRC values for receivers in an active set of the transmitter, and wherein DRCAVE is an average DRC value for the first receiver, wherein DRC is a data rate associated with at least one mobile station and wherein g(d) is a packet delay time function.

4.   (original) In a wireless communication system adapted for packet data transmissions, a method comprising:

identifying a user having a packet delay higher than a threshold; and

adjusting the priority of the user while the packet delay is higher than the threshold.

5.   (new) The method of Claim 4, wherein the threshold is updated during operation of the system.

6.   (new) In a wireless communication system adapted for packet data transmissions, a computer executing logic comprising:

identifying a user having a throughput higher than a threshold; and

adjusting the priority of the user while the throughput is higher than the threshold.

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7. (new) The system of Claim 6, wherein the threshold is updated during operation of the system.

8. (new) The method of Claim 1, wherein the first delay term is calculated as:

$g(d)=1+k*MAX(0, (d_i-\tau_i))$ for packet delay time requirement greater than the first threshold, wherein k is an integer, d_i is a delay time requirement of an ith mobile station, and τ_i is a threshold associated with the ith mobile station.

9. (new) The method of Claim 1, wherein the threshold is updated during operation of the system.

10. (new) The method of Claim 1, wherein a single threshold is used for all mobile stations in the system.

11. (new) The method of Claim 1, wherein at least two mobile stations in the system are associated with respective thresholds.

12. (new) The method of Claim 4, wherein a single threshold is used for all mobile stations in the system.

13. (new) The method of Claim 4, wherein at least two mobile stations in the system are associated with respective thresholds.

14. (new) The system of Claim 6, wherein at least two mobile stations in the system are associated with respective thresholds.

15. (new) The system of Claim 6, wherein a single threshold is used for all mobile stations in the system.

16.   (new) A base station comprising:

means for receiving, from a mobile user, a user packet delay requirement; and

means, responsive to the means for receiving, for establishing a priority of the user based

at least in part on the user packet delay requirement.

17.   (new) In a wireless communication system adapted for packet data transmissions, a

computer executing logic comprising:

identifying a user having a packet delay requirement;

comparing the packet delay requirement to a threshold; and

adjusting the priority of the user based on the comparison.